

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-12: (cancelled)

Claim 13 (currently amended): ~~The switching device of Claim 11,~~ A switching device,
comprising:

a first multi-service segmentation and reassembly (MS-SAR) integrated circuit;

a switch fabric; and

a second multi-service segmentation and reassembly (MS-SAR) integrated circuit, a flow of network information passing into the first MS-SAR, and then through the first MS-SAR, and then through the switch fabric, and then through the second MS-SAR, and then out of the second MS-SAR, wherein the flow passing into the first MS-SAR is of a first traffic type, and wherein the flow passing out of the second MS-SAR is of a second traffic type, wherein the switching device can process the flow for all the four following pairs of first and second traffic types: 1) the first traffic type is ATM and the second traffic type is ATM, 2) the first traffic type is ATM and the second traffic type is packet, 3) the first traffic type is packet and the second traffic type is ATM, and 4) the first traffic type is packet and the second traffic type is packet, wherein the first and second MS-SAR integrated circuits are substantially identical integrated circuits, wherein the switching device can also process a flow such that a single ATM cell is received onto the first MS-SAR and that ATM cell is output from the second MS-SAR encapsulated in a packet, there only being one ATM cell encapsulated in the packet.

Claim 14 (currently amended): ~~The switching device of Claim 11,~~ A switching device,
comprising:

a first multi-service segmentation and reassembly (MS-SAR) integrated circuit;

a switch fabric; and

a second multi-service segmentation and reassembly (MS-SAR) integrated circuit, a flow

of network information passing into the first MS-SAR, and then through the first MS-SAR, and then through the switch fabric, and then through the second MS-SAR, and then out of the second MS-SAR, wherein the flow passing into the first MS-SAR is of a first traffic type, and wherein the flow passing out of the second MS-SAR is of a second traffic type, wherein the switching device can process the flow for all the four following pairs of first and second traffic types: 1) the first traffic type is ATM and the second traffic type is ATM, 2) the first traffic type is ATM and the second traffic type is packet, 3) the first traffic type is packet and the second traffic type is ATM, and 4) the first traffic type is packet and the second traffic type is packet, wherein the first and second MS-SAR integrated circuits are substantially identical integrated circuits, wherein the switching device can also process a flow such that a packet that encapsulates a single ATM cell is received onto the first MS-SAR, and wherein the ATM cell is de-encapsulated and output from the second MS-SAR as an ATM cell.

Claim 15 (currently amended): The switching device of Claim ~~11~~13, wherein the switching device is an OSI layer three Internet Protocol (IP) router.

Claim 16 (currently amended): The switching device of Claim ~~11~~13, wherein the switching device is an OSI layer two switch that does not perform Internet Protocol (IP) routing.

Claims 17 to 55 (cancelled)

Claim 56 (new): The switching device of Claim 13, wherein when the first traffic type is ATM and the second traffic type is packet then the ATM traffic type involves AAL5 adaptation layer cells, and wherein when the first traffic type is packet and the second traffic type is ATM then the ATM traffic type involves AAL5 adaptation layer cells.

Claim 57 (new): The switching device of Claim 14, wherein the switching device is an OSI layer three Internet Protocol (IP) router.

Claim 58 (new): The switching device of Claim 14, wherein the switching device is an OSI layer

two switch that does not perform Internet Protocol (IP) routing.

Claim 59 (new): The switching device of Claim 14, wherein when the first traffic type is ATM and the second traffic type is packet then the ATM traffic type involves AAL5 adaptation layer cells, and wherein when the first traffic type is packet and the second traffic type is ATM then the ATM traffic type involves AAL5 adaptation layer cells.